

19990122.ba v02_n392.bam.990122 v02_n393.bam.990122

>From ???@??? Fri Jan 22 21:45:45 1999
Date: Fri, 22 Jan 1999 12:02:57 CST
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2392
Message-Id: <19990122175250.EA600A011@devel43.theporch.com>

BOATANCHORS Digest 2392

Topics covered in this issue include:

- 1) Re: OTA With The RS-6
by Dick Dillman <ddillman@igc.apc.org>
- 2) picture
by k5jv@von1.com (Lon W. Cottingham)
- 3) isolation
by "Paul Bernhard Sr." <w2tu@email.msn.com>
- 4) Modulator BC456 - See Note 3 ???
by jmccarty@lucent.com (John J Mccarty)
- 5) Clegg Cruiser and what radio is the R-360?
by thompson@mindspring.com
- 6) Re: Modulator BC456 - See Note 3 ???
by Al Klase <skywaves@bw.webex.net>
- 7) Eagle-X transmitter
by dbrady@us.ibm.com
- 8) 75A-4
by luc dugas <collins2@globetrotter.net>
- 9) need rf coil assembly for SX28
by rodger singely <rbsingl@mail.ilstu.edu>
- 10) WTD: Pilot Lamps
by Sandy W5TVW <ebjr@worldnet.att.net>
- 11) FS: URM-25D Signal Generator
by JONWEINER@aol.com
- 12) Re: Crystal Osc. Query
by "Steve" <scb@mail.internettport.net>
- 13) "Receiver Osc. Radiation": Factoid # 378-B
by Kargokult@aol.com
- 14) Re: picture
by "Arden Allen" <gumbear@pacbell.net>
- 15) Re: Ques.: Isolation Transformers for BAs
by "Arden Allen" <gumbear@pacbell.net>
- 16) Re: Recalcitrant VFO...
by "Arden Allen" <gumbear@pacbell.net>
- 17) Re: WANTED: Power supply and Manual CAI C26A
by Dan Arney <kn6di@groupone.net>
- 18) Re: Ques.: Isolation Transformers for BAs

by kd5byb@wt.net
19) Re: "Receiver Osc. Radiation": Factoid # 378-B
by N5CM@aol.com
20) Re: WTD: Pilot Lamps
by John M Iverson <jackiv@juno.com>
21) Re: Eagle-X transmitter
by dbrady@us.ibm.com
22) Spy sets et al.
by BEN NOCK <G4BXD@compuserve.com>

Date: Thu, 21 Jan 1999 08:48:32 -0800 (PST)
Message-Id: <2.2.16.19990121084754.3d77b432@pop.igc.org>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Dick Dillman <ddillman@igc.apc.org>
Subject: Re: OTA With The RS-6

At 10:16 AM 1/21/99 +0100, Ragnar Otterstad wrote:

>>firm knock of the Stazi on the door of your vermin-filled apartment>
>
>Were they ever used in Eastern -Europe ? I doubt it.

I suspect you would know better than I, Rag. I just dredged up the name to lend a bit of color to my narrative. What's *your* opinion as to how and where the RS-6 was used?

I've copied the posts stating that the set was used as part of the survival equipment for aircraft from the B-47 to the P-3. But to me the set has more of the air of a radio one would use as a ground pounding spy.

Regards,

Dick

Dick Dillman
<ddillman@igc.apc.org>
WPE2VT W6AWO
Collector Of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

Message-ID: <00f201be4566\$1a6722a0\$a20adfd0@kingwoodcable.com>
From: k5jv@von1.com (Lon W. Cottingham)

To: Old Tube Radios <boatanchors@theporch.com>
Subject: picture
Date: Thu, 21 Jan 1999 11:47:23 -0600
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="-----_NextPart_000_00EF_01BE4533.CF466BA0"

This is a multi-part message in MIME format.

-----_NextPart_000_00EF_01BE4533.CF466BA0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Greetings to all,

First let me apologize for sending the picture through the =
reflector. I thought I was sending it to "editor@qrz.com". I do not =
know how it got to boatanchors. I am sorry for taking up the bandwidth

I received a Sony digital camera for my birthday. The picture =
was my first attempt to use the automatic delay feature on the camera. =
I set the camera on a Collins speaker cabinet, pointed it toward my =
chair, fired off the delay and ran for my chair. There was no flash, =
just available light. I was pleased enough with the first results to =
send (that is, try to send it) to QRZ. I have now found out that I can =
force the flash on and think I can take a much more focused picture. I =
will try that later, and if anyone is interested, I will be glad to =
discuss the results.

Again my apology for taking up the bandwidth with the picture.=20

73 de Lon Cottingham, K5JV

-----_NextPart_000_00EF_01BE4533.CF466BA0
Content-Type: text/html;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD W3 HTML//EN">
<HTML><HEAD>
<META content=3Dtext/html; charset=3Diso-8859-1 =
http-equiv=3DContent-Type>
<STYLE></STYLE>

<META content=3D'MSHTML 5.00.0910.1309' name=3DGENERATOR></HEAD>
<BODY bgcolor=3D#ffffff>
<DIV>Greetings to all,</DIV>

so they would be protected by your present breakers although only about 80 percent should be used as a steady load. (about 13 amps).

Maybe it would be a good idea to use only one isolated circuit and keep one clear for other uses. (smoke tests, etc.!!)

Hope this helps.

Paul B. w2tu@email.msn.com

<http://www.geocities.com/~dd537>

From: jmccarty@lucent.com (John J Mccarty)
Date: Thu, 21 Jan 1999 12:28:54 -0600
Message-Id: <199901211828.MAA08003@nwsqpb.ih.lucent.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Modulator BC456 - See Note 3 ???
Content-Type: text

Hello all...

I'm working on a BC456 modulator to go with my command set lash-up. When I'm using it the side tone for both voice and cw is quite loud, as in I have to remove the headset to protect my ear-drums. On the schematic (which is the only doc I have on the unit), it shows taps on the voice and tone sidetone windings with the words "See Note 3". Do this taps adjust the volume or just match the unit to the headphone impedance?

Tnx + 73

John McCarty
n9hrt
jmccarty@lucent.com

From: thompson@mindspring.com
Message-ID: <009701be457b\$a7e2b8a0\$a6f545cf@default>

To: Old Tube Radios <boatanchors@theporch.com>
Subject: Clegg Cruiser and what radio is the R-360?
Date: Thu, 21 Jan 1999 15:21:38 -0500

I think I asked this question last fall. A friend has a radio with the label R-360 that looks a lot like an RCA AR-88. Was the R-360 the American Military designation for the AR-88?

I also got some materials on the Clegg Cruiser. Seems this was a RX/TX Converter for 6 meters. Does anyone know when it was produced and which version of Clegg produced it? Looks nifty in the documents. I have never seen one in person.

Questions that need answers.

73 Dave K4JRB

Message-ID: <36A7967B.63D691E1@bw.webex.net>
Date: Thu, 21 Jan 1999 16:04:59 -0500
From: Al Klase <skywaves@bw.webex.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Modulator BC456 - See Note 3 ???
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

John and The Group,

In an actual command set installation, the receivers are run at a fairly high output level. Audio volume is controlled by a series rheostat in each crewman's intercom box (BC-366?). So it does not surprise me that the sidetone from the modulator is pretty hot. Most of us are used to running the receivers with the RF gain control turned way down to provide conformable headphone volume, but that's not what the boys at ARC intended. If memory serves, the series control is something like 100K.

73,
Al

John J Mccarty wrote:

>
> Hello all...
>
> I'm working on a BC456 modulator to go with my command set lash-up.
> When I'm using it the side tone for both voice and cw is quite

> loud, as in I have to remove the headset to protect my ear-drums.
> On the schematic (which is the only doc I have on the unit), it
> shows taps on the voice and tone sidetone windings with the words
> "See Note 3". Do this taps adjust the volume or just match the
> unit to the headphone impedance?

> Tnx + 73

> John McCarty
> n9hrt
> jmccarty@lucent.com

--

Al Klase - N3FRQ
skywaves@bw.webex.net
Flemington, NJ 08822
Web Page: <http://www.webex.net/~skywaves/home.htm>

From: dbrady@us.ibm.com
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <87256700.0078F39B.00@d53mta04h.boulder.ibm.com>
Date: Thu, 21 Jan 1999 15:01:03 -0700
Subject: Eagle-X transmitter
Mime-Version: 1.0
Content-type: text/plain; charset=us-ascii
Content-Disposition: inline

Last weekend an OT let me have his original Novice transmitter.

It's a 6F6 xtal osc driving a 6L6. There was some paperwork with it calling it an "Eagle-X", but no manufacturer's name and no circuit diagram. The paper work describes how to tune it up,etc. and the appearance of the paper itself looks like some very old method of copying.

Physically, the chassis is a single sheet of aluminum, bent to form front/rear supports, open top/ends. Holes are punched not filed and components (sockets/terminal strips/caps,etc.) are low cost variety. Power supply is a separate small unit (400v) on the same style chassis. Tank coil is Johnson ceramic with 5-pins(like 807) and band changing is done with alligator clip on tank coil taps. The RF unit is about 10"W by 3"H by 6"D, no covers or provision for cabinet. Has a #47 bulb as a tuning indicator instead of meters and only adjustments are plate tank and loading. These caps are low cost dual section 365mmf broadcast variables.

OT says he thinks it was a kit, but can't remember much, and isn't sure if he got it before or after WWII.

The 6F6/6L6 was a popular circuit in the late 30's until well after the war.

Has anyone ever heard of this 'Eagle-X' ?? I'm thinking that maybe it was called an 'Eagle Ten' and could have been some individual or small operation selling kits from the back of radio magazines, perhaps based on an article somewhere.

When I got it home, I wiped away the cobwebs, brought it up slow with a variac and plugged in a TV rock. It worked from the 'git go' as we say here in Texas. I had to change to a larger xtal, because the small TV type was heating/drifted during long transmissions. FT-243 size xtal was the cure. I've been using it as an exciter for my 808's amp all week, 'cuz it's ten watts won't get through the QRN on 80M. The 808's bring it up to 120W. I've gotten better reports of signal quality from this little rig than I get from the more complex BA's that I spent so much time fixing/tweaking. Anyway, it's been fun.

73 de W5FRS
Dennis

Message-ID: <36A78DF5.6FEB7259@globetrotter.net>
Date: Thu, 21 Jan 1999 16:28:38 -0400
From: luc dugas <collins2@globetrotter.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: 75A-4
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

ONE FILTER 3.1 KC SERIAL NO:4068(CANADIAN) 4 TO ONE REDUCTION VERNIER.
NEAR PERFECT FRONT PANEL. CABINET HAS MANY SCRATCHES . WORKS GREAT.
LUC VE2LGJ 73S

Message-Id: <3.0.3.32.19990121172518.006ab708@mail.ilstu.edu>
Date: Thu, 21 Jan 1999 17:25:18 -0600
To: Old Tube Radios <boatanchors@theporch.com>
From: rodger singely <rbsingl@mail.ilstu.edu>
Subject: need rf coil assembly for SX28
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

I have nearly completed my SX28 restoration from 2 parts units but I have discovered that one parts unit was missing the rf coils and the other which was partially restored has an older (newer or at least different given black versus tan forms) version of the mixer coil assembly installed where the rf coils belong. Amazingly (or maybe not with all the gain available in the SX28) it sort of works with the wrong coils but not as well as it should. The stage does not track well and the coils are at the limit of their adjustment and the gain is still increasing so I do need the correct parts. So, if someone has a parts SX28 I would really like to obtain the intact RF coil assembly. I am pretty sure from past posts that this is the non "a version". The coils all do mount to a single "chassis" but look nothing like the photo of the coils shown in a known SX28A.

I can either provide cash or other parts in trade!

Thanks,
Rodger WQ9E

Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: WTD: Pilot Lamps
Message-Id: <19990122022200.EPPT20651@LOCALNAME>
Date: Fri, 22 Jan 1999 02:22:00 +0000

Looking for a source of pilot lamps. Type number unknown. These are made by G.E.C. (England). Physically they are identical to a #50 lamp. (G3-1/2 bulb and a miniature screw base.) Electrically rated at 6 volts @ 60 ma.

I just used my last one and would like to buy a box or two. Any of you UK types out there? They make really dandy low current RF indicators when shunted by a small coil. Closest thing I can get here is a #40, but @ 150 ma. not nearly as sensitive an indicator!

73,
Sandy W5TVW

From: JONWEINER@aol.com
Message-ID: <fa79ea56.36a7e05c@aol.com>
Date: Thu, 21 Jan 1999 21:20:12 EST
To: Old Tube Radios <boatanchors@theporch.com>
Mime-Version: 1.0
Subject: FS: URM-25D Signal Generator
Content-type: text/plain; charset=US-ASCII

Content-transfer-encoding: 7bit

I am selling a URM-25D signal generator. This is the hard to find model that goes down to 10KHz, perfect for adjusting those double conversion receivers with low IF's (i.e. Hallicrafters @ 50.75KHz). In good condition, with some residue from packing tape around the dial. A soaking with WD-40 should remove it. No cover. Price \$125., plus shipping from Greenville, SC.

Jon, K1VVC

Message-Id: <199901220627.AAA28135@loki.internettport.net>
From: "Steve" <scb@mail.internettport.net>
To: Old Tube Radios <boatanchors@theporch.com>
Date: Fri, 22 Jan 1999 00:11:47 +0000
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Subject: Re: Crystal Osc. Query
CC: <boatanchors@theporch.com>

Hi Jan & Group;

When I used to repair the early LCD quartz watches I became convinced that the xtals in some of them were driven hard enough to cause the quartz element to "shed" material or shatter entirely. Replacing the xtal would temporarily restore accuracy into range of the trimmer cap. Then the rate would creep up again until out of range of the trimmer. Try replacing the xtal & see what happens.

The calibrator xtal in my R390-A was above range of the trimmer also & I understand this is not unusual in these. Perhaps some crystals simply shed mass during prolonged operation due to flaws, ect., while others are heavily driven in some circuits, the '390 calibrator being one. Also, some power xtal oscillators were notorious "crystal killers".

Experiences, anyone?

Regards: Steve

From: Kargokult@aol.com
Message-ID: <edec9f42.36a82fd8@aol.com>
Date: Fri, 22 Jan 1999 02:59:20 EST
To: Old Tube Radios <boatanchors@theporch.com>
Mime-Version: 1.0
Subject: "Receiver Osc. Radiation": Factoid # 378-B
Content-type: text/plain; charset=US-ASCII

Content-transfer-encoding: 7bit

hello boys n girls-
while doing some surface mining of old paper, whilst moving
them around, i found while perusing some log sheets, this
title and excerpted lines:

DAILY RADIO LOG
ALASKA STEAMSHIP COMPANY
S.S. - LAKINA
VOYAGE NO. 68

```
.....
10th      0000    600    VAK - VAE
           0015     "      QUIET
           0030     "      VAK - VAE  33-CALL WCCY - NO ANS.
           0045     "      QRM FM SOMEONES RECEIVER
           0100    48      CALL KPE - N.A.  05 - CALL KPE - NO ANS. ( 48 )
.....
```

[notes, and my comment: year = 1935, month still to be discovered,
"10th" = day, "600" and "48" = wavelength, approx location believed
to be somewhere along north end of Vancouver Island
on inside passage to Alaska and Aleutian Islands. This ship Lakina
was a coastal freighter which carried 248 tons of merchandise
and some passengers for a score of landings at Alaska towns and
cannery plants, and on the return to Seattle home port hauled back
canned fish. Transmitter = Mackay 130-A. Receiver = Sargent 10
and believe emergency receiver = SW-3 and emergency crystal
set receiver = Mackay 123.

This was a well travelled route and there would have been always
a few other ships within a few miles, thus the radiation from
someones WW1 surplus Navy regen receiver could be received.
This proximity to another ship would of course be much less
frequent out on the open sea, so the phenomenon would be
probably rarely reported out on Atlantic or Pacific crossings.

As one would expect, the pages reflect maybe 90% of the traffic
transacted, was on 600 meters, the well known 500 kc/s. some
use of HF, and much more rarely, wavelength given as only "LW"
which i would guesstimate meant something in the 400 kc/s range.]
Also: i see this listing:

8TH 0030 600 FAINT ICW SIGS QRJ

[i think this means he heard faint unreadable spark signal]

also, i note that the log complains

10TH 2200 600 B. C. QRM.

starting about 90 minutes out from the end of the voyage at Seattle. this *may* have been due to the TRF receiver overloading from strong BC signals from high power Seattle broadcasting stations with towers on islands north of Seattle (i suppose i am thinking of KIRO 710.)

Sargent had a service note that indicated certain condensers of about 1000 uuF had to be across the receiver's LF antenna coils to swamp out stronger higher frequency signals. The publisher of Radio Bygones in the UK wrote me regarding another receiver, Marconi 730, that receiver blocking due to highpower broadcast signals was the downfall of that receiver, so maybe this receiver blocking thing was a common problem with using regen receivers and high long antennas such as on ship. Alaska Steam, to their credit, had upgraded from the olde Navy SE- receivers, but apparently they couldn't see to spending the big bucks for Hallicrafters radios (hi hi).

smooth sailing and good DX,
hue miller

Message-Id: <199901221206.EAA03515@mail-gw2.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: picture
Date: Fri, 22 Jan 1999 03:35:32 -0800
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

We can see you're a good looking fellow Lon, but where do you keep all the boatanchors???

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Message-Id: <199901221206.EAA03520@mail-gw2.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Ques.: Isolation Transformers for BAs
Date: Fri, 22 Jan 1999 04:07:13 -0800
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi Bob;

> There has been discussion of isolation transformers here in the past,
> and also the benefits of lowering line voltage for BAs.

There is no net benefit to using isolation transformers in your shack in my opinion. Lowering line voltage from 120+ volts to the 115 or 117 volt design center voltage for BA's does not buy much tube longevity. More money will eventually be spent paying the electric bill for the constant transformer excitation current. The only protection an isolation transformer will buy you is while working on an AC/DC chassis. If you are running an AC/DC BA (like a Scott SLR-M) where one side of the chassis is connected to the power line cord it is safest to use an individual isolation transformer with a special connector between transformer and radio so that the radio cannot be run without the isolation transformer. Also, because you need adequate RF and lightening protection grounding for your station you won't realize much line noise attenuation unless using a *high isolation* transformer (such as used for medical isolation and costs \$\$\$\$\$\$). Line noise is best dealt with by proper line bypassing and filtering (especially for those digital noise makers). The best use I can think of for a 2 KVA isolation transformer is as an anchor to keep the shack from blowing away in a hurricane. If you really want to regulate shack line voltage see if you can dig up a 25 amp variac. Have fun.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Message-Id: <199901221217.EAA06520@mail-gw2.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Recalcitrant VFO...
Date: Fri, 22 Jan 1999 04:19:01 -0800
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi Jack;

>
> My question is this -- why are the crystals connected through the switch
> directly to a grid of the mixer (pin 2 of the 6BA7) just like the
> internal/external VFO -- I would think that the crystals would be part of
> the VFO. The crystals must directly oscillate without any of the VFO
> circuitry -- I do not understand.

The 6BA7 is a pentagrid converter tube (like the 6SA7 and 6BE6). The first control grid is the oscillator grid when used as a converter but in your case the oscillator tank is a crystal! Now you understand..... 73.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Message-ID: <36A88211.DF7EB38@groupone.net>
Date: Fri, 22 Jan 1999 05:50:09 -0800
From: Dan Arney <kn6di@groupone.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: WANTED: Power supply and Manual CAI C26A
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Still looking and waiting. Help please.
Thanks, Hank

From: kd5byb@wt.net
To: Old Tube Radios <boatanchors@theporch.com>
Date: Fri, 22 Jan 1999 07:36:48 +600
Subject: Re: Ques.: Isolation Transformers for BAs
Message-id: <36a87ef0.54a6.0@wt.net>

>Lowering line voltage from 120+ volts to the 115 or 117 volt
>design center voltage for BA's does not buy much tube >longevity.

Hi Arden and list!

I thought the relation between tube filament life and filament voltage was exponential
- ie: small reductions in filament voltage produced good-sized gains in filament life?

Didn't someone on the list post the results of a study by GE, RCA, Sylvania or somebody that showed for 10% reduction in filament voltage there was a 50% gain in filament life? Or is my brain foggy this morning?

The reason I'm asking is that I've got a large isolation/voltage reduction transformer (7500 VA!) that I had planned to use to run all the BA's off of when I get a real shack (barn, garage, etc)...

Thanks and 73,
Ben

Benjamin D. Hall, KD5BYB
e-mail: KD5BYB@WT.NET

From: N5CM@aol.com
Message-ID: <1f1ea9de.36a89ef3@aol.com>
Date: Fri, 22 Jan 1999 10:53:23 EST
To: Old Tube Radios <boatanchors@theporch.com>
Cc: boatanchors@theporch.com
Mime-Version: 1.0
Subject: Re: "Receiver Osc. Radiation": Factoid # 378-B
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Hi Hue,

The "ICW" means "Interrupted Continuous Wave". This would not be a spark transmitter because the term "CW", which means "Continuous Wave" came into use after the vacuum tube transmitters arrived on the scene.

Spark transmitter emit a "Damped Wave", each burst decaying (if I remember correctly) at a logarithmic rate. A dot in code would not be a burst but a series of bursts, each beginning at maximum and decaying to zero when a new burst began.

Hope my memory serves me right!

73, Ken....N5CM....

after the vacuum tube arrived on the scene to differentiate between spark and vacuum transmitters

To: Old Tube Radios <boatanchors@theporch.com>
Cc: boatanchors@theporch.com
Date: Fri, 22 Jan 1999 11:21:37 CST
Subject: Re: WTD: Pilot Lamps
Message-ID: <19990122.112139.10334.2.jackiv@juno.com>
From: John M Iverson <jackiv@juno.com>

A GOOD REPLACEMENT IS A #49, EASILY AVAILABLE BUT BAYONET BASE. JACK
(sorry about the caps,)

Jack Iverson K0EWU jackiv@juno.com
ARRL, IEEE LM, RCA, AMI, ARCI, QCWA

On Fri, 22 Jan 1999 02:22:00 +0000 Sandy W5TVW <ebjr@worldnet.att.net> writes:

> Looking for a source of pilot lamps. Type number unknown.
>These are

>made by G.E.C. (England). Physically they are identical to a #50
>lamp.
>(G3-1/2 bulb and a miniature screw base.)Electrically rated at
>6 volts @ 60 ma.
> I just used my last one and would like to buy a box or two.
>Any of you
>UK types out there? They make really dandy low current RF indicators
>when shunted by a small coil. Closest thing I can get here is a #40,
>but
>@ 150 ma. not nearly as sensitive an indicator!
>73,
>Sandy W5TVW
>
>

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com/getjuno.html>
or call Juno at (800) 654-JUNO [654-5866]

From: dbrady@us.ibm.com
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <87256701.0062FFE7.00@d53mta04h.boulder.ibm.com>
Date: Fri, 22 Jan 1999 11:00:49 -0700
Subject: Re: Eagle-X transmitter
Mime-Version: 1.0
Content-type: text/plain; charset=us-ascii
Content-Disposition: inline

Anchorites,

Here's the answer to my question about the Eagle-X. Many thanks to Dave
who once again demonstrates what a great bunch of folks are on this list.
It would have taken me forever to find anything. I'll search the old
magazines
and look for ad's for the Eagle-X.

----- Forwarded by Dennis Brady/Dallas/IBM on 01/22/99
11:48 AM -----

thompson@mindspring.com on 01/21/99 09:34:31 PM

To: Dennis Brady/Dallas/IBM
cc:
Subject: Re: Eagle-X transmitter

Dennis,

The Eagle-X was made in 1938 to 40 by a private firm near Chicago. Its another in the line of 6L6 or 6ag7 units that started the transmitter on a chassis craze. Stancor, Hart. Micamold were similar although post war they had plug in coils etc. The Philmore and Ameco were the last of the line. They were made popular by W9BRD at QST and Lew McCoy jumped on the bandwagon with his transmitters made from TV parts (I thought you had to be very innovative to make one from a TV...from parts at BA maybe.) You have a very rare bird....take good care of it.

73 Dave K4JRB

Date: Fri, 22 Jan 1999 13:01:05 -0500
From: BEN NOCK <G4BXD@compuserve.com>
Subject: Spy sets et al.
To: Old Tube Radios <boatanchors@theporch.com>
Cc: <ddillman@igc.apc.org>
Message-ID: <199901221301_MC2-67A9-15FD@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain; charset=ISO-8859-1
Content-Disposition: inline

Dick Dillman <ddillman@igc.apc.org> said:

>But I'll probably bring it down to the Military Radio Collectors Group
meet
>later this year along with the AN/GRC-109 for a modest display of
operating
>"spy radios".
>
>Anyone else out there into these things?
>

Sure am Dick. Have the RS-6, works well this side of the pond as well. The
Grc-109 does too, =

cheers Dick. Ben G4BXD.

>From ???@??? Sat Jan 23 11:23:53 1999
 Message-Id: <199901230322.VAA29056@sco.theporch.com>
 Date: Fri, 22 Jan 1999 21:21:51 CST
 From: Old Tube Radios <boatanchors@theporch.com>
 To: Old Tube Radios <boatanchors@theporch.com>
 Subject: BOATANCHORS digest 2393

Topics covered in this issue include:

- 1) FS:R390 parts / need hro5 coils
by Tom Smith <tsmith@hal-pc.org>
- 2) Re: Modulator BC456 - See Note 3 ???
by David Stinson <arc5@ix.netcom.com>
- 3) Re: "Receiver Osc. Radiation": Factoid # 378-B
by Sandy W5TVW <ebjr@worldnet.att.net>
- 4) Re: Spy sets... rs-6???
by polepeeg@aa4rm.ba-watch.org (Marty's Refl. Drop)

- 5) RE: Modulator BC456 - BC366 More questions
by jmccarty@lucent.com (John J Mccarty)
- 6) R-390 non A power cords.
by vigar@interport.net
- 7) Stuff for sale, SOLD!
by William Donzelli <william@ans.net>
- 8) Re: Modulator BC456 - BC366 More questions
by Al Klase <skywaves@bw.webex.net>
- 9) Re: Modulator BC456 - BC366 More questions
by Al Klase <skywaves@bw.webex.net>
- 10) Re: Modulator BC456 - BC366 More questions
by AAFRadio@erols.com
- 11) 304TL HEATER REQ.
by "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
- 12) P-type connector wanted
by "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
- 13) RE: "Receiver Osc. Radiation": Factoid # 378-B
by "David Newkirk" <dpnewkirk@home.com>
- 14) DX-40 Tube Line-up?
by <davidh@getnet.com>
- 15) WANTED: SX28 rf coils or complete parts unit
by rodger singely <rbsingl@mail.ilstu.edu>
- 16) Re: 304TL HEATER REQ.
by Bob Roehrig <broehrig@admin.aurora.edu>
- 17) Re: Crystal Osc. Query
by "Barry L. Ornitz" <ornitz@tricon.net>
- 18) miami and orlando hamfest
by luc dugas <collins2@globetrotter.net>
- 19) Re: Ques.: Isolation Transformers for BAs
by "Barry L. Ornitz" <ornitz@tricon.net>
- 20) Re: "Receiver Osc. Radiation": Factoid # 378-B
by John Dilks <oldradio@worldnet.att.net>
- 21) Re: Crystal Osc. Query
by Sandy W5TVW <ebjr@worldnet.att.net>
- 22) Re: "Receiver Osc. Radiation": Factoid # 378-B
by "Neal McEwen, K5RW" <nmcewen@metronet.com>
- 23) looking for info
by "Roberta J. Barmore" <rbarmore@indy.net>

Message-ID: <36A868FE.8F54725B@hal-pc.org>
Date: Fri, 22 Jan 1999 12:03:10 +0000
From: Tom Smith <tsmith@hal-pc.org>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: FS:R390 parts / need hro5 coils
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Group,

I have a partial carcass for the R390 which includes a lot of the rf coils/mechanism/slugs and gears. Anybody need some gears or slugs for your receiver can have the carcass for \$10+shipping.

I still need E,F,G coils for my HRO-5. Help!

Thanks! Tom N5AMA

Message-ID: <36A8C9DA.2BB0D17D@ix.netcom.com>

Date: Fri, 22 Jan 1999 12:56:26 -0600

From: David Stinson <arc5@ix.netcom.com>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: Modulator BC456 - See Note 3 ???

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

> I'm working on a BC456 modulator to go with my command set lash-up.
> When I'm using it the side tone for both voice and cw is quite
> loud, ...

The "Sidetone" output of the command sets was never intended to go directly into the operator's headset during actual use. The audio outputs of the receivers were matched to the level of the sidetone output and all were feed to the aircraft intercom system. From there the audio was distributed to individual headphone jack boxes. These boxes supplied a volume control for each listener.

You can address the problem by non-destructively inserting some padding resistors at the output of the sidetone winding or by using an external audio padder and cranking-up the receivers to match the sidetone. I prefer the former, simply inserting a padding resistance in the sidetone line.

Good luck with it, fellow Command Set fan!

73 DE Dave Stinson AB5S

arc5@ix.netcom.com

p.s. You have polished the silver-plated stuff in the tank and antenna circuits of your transmitters, right ;-)?

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: Re: "Receiver Osc. Radiation": Factoid # 378-B
Message-Id: <19990122191352.ESVP23979@LOCALNAME>
Date: Fri, 22 Jan 1999 19:13:52 +0000

At 10:53 AM 1/22/99 EST, you wrote:

>The "ICW" means "Interrupted Continuous Wave". This would not
>be a spark transmitter because the term "CW", which means
>"Continuous Wave" came into use after the vacuum tube
>transmitters arrived on the scene.
>
>Spark transmitter emit a "Damped Wave", each burst decaying
>(if I remember correctly) at a logarithmic rate. A dot in code would
>not be a burst but a series of bursts, each beginning at maximum
>and decaying to zero when a new burst began.
>
>Hope my memory serves me right!
>
>73, Ken....N5CM....
>

You are correct Ken! "ICW" meant a modulated (A2) CW wave.
This was sometimes carried out by means of a commutator or some
form of mechanical interruptor. It was also used on Poulsen arc transmitters
which were once common on ships for the LF spectrum around 120-150 Khz.
Poulsen arc was a CW signal, unlike spark or damped waves.

73,
Sandy W5TVW

Date: Fri, 22 Jan 1999 16:12:12 -0500
From: polepeeg@aa4rm.ba-watch.org (Marty's Refl. Drop)
Message-Id: <199901222112.QAA08643@aa4rm.ba-watch.org>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: ddillman@igc.apc.org
Subject: Re: Spy sets... rs-6???

Ben I did some talking to a B-36 flight engineer who said that tho slow
& lumbering, at least the B-36 would take you home @ great elevation as
would the 1954-incoming B52.

But the B-58 bomber of the 1954-future & the B45s & B47s were
one-way mission critters since you'd be durn lucky to get a still-
flying KB-50 tanker anywhere near one in the event of a free-for-all.
This from a mid-1950s LAC employee.

Now that mid-1950s bomber genere wud be stuck "after delivery." That is they'd have to ditch. The rs-6 filled the need to get back in contact if anything was left.

This is first hand stuff from same LAC guy, a still-active ham, that trained USAF classes.

Maybe the absence of rs-6 parental markings was prompted by anticipated ditchings in neutral places. Maybe that's why the only 3 rs-6 books I've seen are missing the cover & the first 2 pages

Maybes everywhere

Tried for CIA connection with a 20-year employee who got real perked up by the history chase. But alas no evidence anywhere he looked re agency rs-6s

I've showed them now to 4 1960s P3 crewman & all but one is simply stumped. Looks like no USN use either.

But everyone's entitled to believe they're spy sets. Just ask Peter Pan.

Marty

ps LAC=Lockheed

From: jmccarty@lucent.com (John J Mccarty)
Date: Fri, 22 Jan 1999 15:19:32 -0600
Message-Id: <199901222119.PAA29990@nwsqpb.ih.lucent.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Modulator BC456 - BC366 More questions
Content-Type: text

Gang;

Yesterday, I asked a question about side tone volume from the BC456 modulator, for which Al offered this answer:

>John and The Group,

>

> In an actual command set installation, the receivers are run at a

>fairly high output level. Audio volume is controlled by a series
>rheostat in each crewman's intercom box (BC-366?). So it does not
>surprise me that the sidetone from the modulator is pretty hot. Most of
>us are used to running the receivers with the RF gain control turned way
>down to provide conformable headphone volume, but that's not what the
>boys at ARC intended. If memory serves, the series control is something
>like 100K.
>
>73,
>Al

O.K., so next question. How was the BC-366 intergated into the system. I have one of these in my junk box. It's in the junk box because someone kind-of booggered it up. Given that I can put it back together, how was it wired into the system. Did the cable that came out of the top terminate in 1/4" plugs to match the contol boxes and racks, or was there a terminal strip where it was cross connected???

Tnx agn + 73

John McCarty
n9hrt
jmccarty@lucent.com

From: vigar@interport.net
Message-Id: <1.5.4.32.19990122220533.006b68c0@pop.interport.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Fri, 22 Jan 1999 17:05:33 -0500
To: Old Tube Radios <boatanchors@theporch.com>
Subject: R-390 non A power cords.

BA Groupies:

I have a quantity of used Rt. angle power connectors for the R-390 (or other radios such as the GRC-106 & etc.). These are used and in very good condition except that someone has painted them in pastel colored red or green (I have no idea why!). These connectors are made by General Connector and are p/n UW1320FA17.

Selling price is \$10.00 ea plus \$3.20 Priority mail. If you need a line cord to go with it I can supply one for an additional

\$1.50; if you want the line cord wired for the R-390 add on \$2.50 over and above. Regards.

Gary, K2ZSZ

Date: Fri, 22 Jan 1999 17:38:13 -0500 (EST)
From: William Donzelli <william@ans.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Stuff for sale, SOLD!
Message-Id: <Pine.GS0.3.96.990122173311.24929H-100000@titan.purch.ans.net>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Response has been quite good for some of the tubes, so I am going have to cut off some as "sold".

I have not decided who gets what yet (please be patient), but I have plenty of requests for the 26Z5Ws, 816, nuvistors, globe oldies, and the ratty metals.

Thank you all.

William Donzelli
william@ans.net

Message-ID: <36A8FDCF.8D59FAAD@bw.webex.net>
Date: Fri, 22 Jan 1999 17:38:07 -0500
From: Al Klase <skywaves@bw.webex.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Modulator BC456 - BC366 More questions
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

John J Mccarty wrote:

>
>
> O.K., so next question. How was the BC-366 intergated into the
> system. I have one of these in my junk box. It's in the junk box because
> someone kind-of booggered it up. Given that I can put it back together, how
> was it wired into the system. Did the cable that came out of the top
> terminate in 1/4" plugs to match the contol boxes and racks, or was
> there a terminal strip where it was cross connected???

>
This is based on drawings for B-17's. The audio inputs and outputs

from the compass receiver (output only), liaison set (typ. BC-375/BC-348), command set (SCR-274), and interphone amplifier are bussed to each crew position via shielded cable. (Well, almost. Liaison transmit is limited to pilot, co-pilot, navigator, and radio operator.) The switch on the BC-366 jack box allows selection of one of the buses. The spring loaded "CALL" position connects your mic to the interphone input and shorts all the output buses together so you can get someone's attention regardless of what he's listening to. "Pilot to navigator." etc.

I found it interesting that everyone had access to the command transmitter. Did gunners use the command set, for instance, to coordinate fire between aircraft?

BTW, I'm looking for a BC-347 interphone amp and accessories for when I continue the Command Set project.

73,
Al

--

Al Klase - N3FRQ
skywaves@bw.webex.net
Flemington, NJ 08822
Web Page: <http://www.webex.net/~skywaves/home.htm>

Message-ID: <36A901E8.7C4048AF@bw.webex.net>
Date: Fri, 22 Jan 1999 17:55:36 -0500
From: Al Klase <skywaves@bw.webex.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Modulator BC456 - BC366 More questions
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Also, to save potential BC-366 users some ohm meter work, here's the connection info:

1. Compass RX
2. Liaison TX
3. Command TX
4. Interphone amp input
5. Interphone amp output
6. Liaison RX
7. Direct connect to headset, bypasses volume control, not used B-17
8. Liaison TX push-to-talk
9. Command TX push-to-talk
10. Command RX

11. Ground

Mic jack: tip = PTT, ring = carbon mic, sleeve = ground

--

Al Klase - N3FRQ
skywaves@bw.webex.net
Flemington, NJ 08822
Web Page: <http://www.webex.net/~skywaves/home.htm>

From: AAFRadio@erols.com
Message-ID: <36A90C34.5B82A7FB@erols.com>
Date: Fri, 22 Jan 1999 18:39:32 -0500
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Modulator BC456 - BC366 More questions
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

One needs to understand that Al, Dave, myself, and a select few enthusiasts always tend to look at the larger picture...installation in a multi-engine aircraft with more than one crew member. The reason is (of course) - it multiplies the possibilities for hardware in our rigs!! :-)) I just made a count on the WWII airborne interphone systems in the basement 'flight deck,' and came up with an improbable 13...the DoD bean counters looking for duplication would have had a field day if they'd existed in 1945. I've replied privately to John on the "small solution", but it's relevant to observe that "Note 3" (which addresses earphone impedances) clearly has nothing to do with interphone sets from a systems standpoint. It's useful to recall that HF command sets were installed in fighter aircraft, including the P-51...no interphone sets there. You can use the BC-456 directly with a headset, as designed, but the earphones definitely need to be matched to the output impedance tap of the set for the *system*, whatever that may be.

Now, having said that, I gotta say, you haven't *lived* until you get a military airborne set fed through its corresponding interphone system. The improvement in soundstage and transparency is phenomenal! :-))

73,
Mike Hanz KC4TOS

Date: Fri, 22 Jan 1999 19:20:44 -0500
From: "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
Subject: 304TL HEATER REQ.
To: Old Tube Radios <boatanchors@theporch.com>

Message-ID: <199901221920_MC2-67AF-CBF6@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain; charset=ISO-8859-1
Content-Disposition: inline

Group,

Picked up three 304TL's today and a 250TL (not TH). Does anyone remember off the top of their head what the heater requirements in the 304 are? I hooked my LV supply to each half of the heater string in one of them and they each drew about 12 amps at 5 volts. The heaters also don't get as bright as the ones in the 75, 100, 250 and 450TH/L's. Does anyone know if that's correct. For that matter, does anyone need these suckers? I certainly don't. I have a quote from AES but would let them go to a list member first.

73,
Robert Downs
WA5CAB
Houston, TX

Date: Fri, 22 Jan 1999 19:20:39 -0500
From: "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
Subject: P-type connector wanted
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199901221920_MC2-67AF-CBF4@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain; charset=ISO-8859-1
Content-Disposition: inline

Andy and Group

The Cannon P-8-xx is the connector family used on the SCR-284 (BC-684, PE-103, etc.). The line came in 2, 3, 4, 5, 6 & 8 contact variants. =

Besides the ones on my SCR-284 (and spares), I have some pieces of 3 contact plugs and maybe 6 contact. Andy, I'll have to dig around through

the boxes to see just what I do have other than 8-pin which are reserved for SCR-284's. I can probably get them carried to Bordon, UK free. We have an office there and people are often going back and forth. If anyone=

e
is aware of another radio which used the "P" series, I'd be interested in= knowing about it.

73,
Robert Downs
WA5CAB
Houston, TX

From: "David Newkirk" <dpnewkirk@home.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: "Receiver Osc. Radiation": Factoid # 378-B
Date: Fri, 22 Jan 1999 19:33:57 -0500
Message-ID: <000501be4668\$10813980\$11670518@cc328679-a.vron1.nj.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Ken, N5CM, wrote:

> The "ICW" means "Interrupted Continuous Wave". This would not
> be a spark transmitter because the term "CW", which means
> "Continuous Wave" came into use after the vacuum tube
> transmitters arrived on the scene.

As I believe another correspondent has mentioned, continuous-wave radio predates the production of CW signals by vacuum tubes, and in a big way: 500-kW (input) arc transmitters were used at Annapolis, Pearl Harbor and Cavite (the Philippines); the most powerful one, at a station near Bordeaux, France, ran 1 *megawatt* input. Sometimes referred to as arc *converters* (because, just as today's active devices do, they served to convert dc into RF), they were 50% efficient. See Thorn L. Mayes, *Wireless Communication in the United States* (ISBN 0-9625170-0-3) and Hugh. G. J. Aitken, *The Continuous Wave : Technology and American Radio, 1900-1932* (don't have the ISBN, and sure wish I had a copy of this one).

BTW, the term "backwave," which today means on-frequency leakage during key-up periods, came from arc-transmitter technology. The arcs used frequency-shift keying because the arc had to be kept burning. The frequency-shifted signal emitted during key-up periods was the backwave; the term "spacing wave" meant the same thing.

73,

Dave Newkirk, W9VES

dpnewkirk@home.com

Message-Id: <199901230058.SAA27656@sco.theporch.com>
Subject: DX-40 Tube Line-up?
Date: Sat, 23 Jan 99 00:57:23 +0000
From: <davidh@getnet.com>
To: Old Tube Radios <boatanchors@theporch.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

Trying to determine what the audio section tube line up is. My DX-40 has the 2 6CL6s and the 5U4 and the 6146B but the audio section has one tube with no marking and and a 6DE7 for the other which I am suspicious of. Have a DX-35 schematic and it shows two 12AX7s. Is this the same for the DX-40?

Can anyone answer my question?

73,

Dave N7RK

Dave N7RK - Webmaster CADXA
Phoenix, Arizona *DXCC Honor Roll* *WAZ#23 - 75 Meter SSB*

ex-N7RK/ZB2, VK2ERK, ZM0AJN, WB6NRK, WN6IWX

Boatanchor Collector Extraordinaire preferring Hallicrafters, National and what ever else looks interesting!

E-Mail: davidh@getnet.com
My Home Page: <http://www.getnet.com/~davidh>

Visit the Central Arizona DX Association Home page - <http://cadxa.org>

Message-Id: <3.0.3.32.19990122191954.006ab154@mail.ilstu.edu>
Date: Fri, 22 Jan 1999 19:19:54 -0600
To: Old Tube Radios <boatanchors@theporch.com>
From: rodger singely <rbsingl@mail.ilstu.edu>
Subject: WANTED: SX28 rf coils or complete parts unit
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Well gang,

Since my request for just the coils doesn't seem to be stirring any up, if someone has a parts SX28 I would like to purchase the entire carcass. The major requirement: it must have the RF coils (xfmrs between V1 and V2) intact. Please help save an SX28. This has been a long term project including complete recapping and much re-resistoring; gear train disassembled, main tuning shaft straightened, new ball bearings installed, switch wafer in antenna coil section painstakingly rebuilt, etc. etc. I have spent a lot of hours on this neat looking halli and I hate to think that this is going to end up in a box for "someday" instead of pairing up with my Viking 1 (which is making out okay with an NC240D but the SX28 style would match much better :-)

Thanks!!!

Rodger WQ9E

Date: Fri, 22 Jan 1999 19:21:32 -0600 (CST)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: 304TL HEATER REQ.
Message-ID: <Pine.ULT.3.96.990122192020.23766A-1000000@admin.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

the 304TL (TH also for that matter) is 5.0V at 24 to 28 amps.

"Nostalgia is a thing of the past"
E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

From: "Barry L. Ornitz" <ornitz@tricon.net>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "Boatanchors Mailing List" <boatanchors@theporch.com>
Subject: Re: Crystal Osc. Query
Date: Fri, 22 Jan 1999 21:19:18 -0500
Message-ID: <01be4676\$c7d0fcc0\$ae4562d8@ornitz.dpnnet.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Steve wrote:

>The calibrator xtal in my R390-A was above range of the trimmer also
>& I understand this is not unusual in these. Perhaps some crystals
>simply shed mass during prolonged operation due to flaws, ect., while
>others are heavily driven in some circuits, the '390 calibrator being
>one. Also, some power xtal oscillators were notorious "crystal killers".
>Experiences, anyone?

Crystals typically do not "shed mass" unless the crystal is driven hard enough to shatter it (*). But all crystals drift, especially at high temperatures. The R-390A calibrator crystal is operated in an oven which makes this drift worse (**). Crystals designed for oven use usually have a different cut for the higher temperature. But they still drift and age.

Maximum power ratings for crystals is something many manufacturers ignored until recent years. The small computer crystals have quite low power ratings. The recommended power ratings on these are typically 10 to 100 microwatts. Except for custom applications built on special order, the crystal manufacturers have abandoned the large pressure mount crystals that could take several hundred milliwatts or more.

(*) But crystals can shed the rubbed on solder or graphite used to "rubber" them. The vacuum sputtered or electroplated electrodes do not come off. Surface acoustic wave devices can "pump" surface adsorbed contaminants to one end of the filter.

(**) In general, the ovens in the R-390A should be turned off unless you operate the radio in arctic conditions. The excess heat is rarely needed and with the ovens on, the high temperature prematurely ages the components in the radio.

73, Barry WA4VZQ ornitz@tricon.net

Message-ID: <36A918FC.2485DD8A@globetrotter.net>

Date: Fri, 22 Jan 1999 20:34:05 -0400

From: luc dugas <collins2@globetrotter.net>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

Subject: miami and orlando hamfest

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

can someone tell where i can get info about these hamfests. person to contact to rent space address where is held the fest etc. thanks luc

From: "Barry L. Ornitz" <ornitz@tricon.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Ques.: Isolation Transformers for BAs
Date: Fri, 22 Jan 1999 21:31:13 -0500
Message-ID: <01be4678\$72438500\$ae4562d8@ornitz.dpnnet.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="utf-8"
Content-Transfer-Encoding: 7bit

Ben Hall wrote:

>I thought the relation between tube filament life and filament voltage was
exponential
>- ie: small reductions in filament voltage produced good-sized gains in
filament
>life?
>
>Didn't someone on the list post the results of a study by GE, RCA,
Sylvania
>or somebody that showed for 10% reduction in filament voltage there was a
50%
>gain in filament life? Or is my brain foggy this morning?

The study was for incandescent lamps, I think. Vacuum tube filaments
operate at much lower temperatures. The effect is exponential, like Ben
wrote, but it is much less sensitive at the lower operating temperatures.
Transmitting tube filaments, especially those of the directly heated
cathode type, need to be kept within 5% or better of their rated voltage,
but receiving tubes are pretty forgiving.

Instead of an expensive isolation transformer to drop the shack voltage,
use an old filament transformer. The primary is wired in parallel with the
line, while the secondary is wired in series with the line. Depending on
how the windings are phased, you can buck or boost the line voltage by the
filament transformer's voltage. Remember the filament transformer's
secondary must be rated for enough current to supply the shack needs. Thus
a 12 volt, 4 amp filament transformer can buck or boost the line voltage by
12 volts and handle about 500 watts.

73, Barry WA4VZQ ornitz@tricon.net

Message-ID: <36A93861.36AB@worldnet.att.net>
Date: Fri, 22 Jan 1999 21:48:01 -0500
From: John Dilks <oldradio@worldnet.att.net>
MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: "Receiver Osc. Radiation": Factoid # 378-B
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

N5CM@aol.com wrote:

>
> Hi Hue,
>
> The "ICW" means "Interrupted Continuous Wave".
-----snip-----

To see a real "ICW" or "Chopper" -- I have a web page dedicated to this. It is complete with a photo (of the one I own, [thanks to a list member]). And there is a schematic to show exactly how it was used in the circuit.

<http://www.eht.com/oldradio/history/xmtr-parts/chopper1.htm>

BTW= It won a ribbon at the AWA meet last year.

--

73' John Dilks, K2TQN

Please visit my OldRadio Museum
<http://www.eht.com/oldradio/museum>

Webmaster for the Antique Wireless Association
<http://www.ggw.org/awa> Click on "Page 2"

--and--

for the New Jersey Antique Radio Club
<http://www.eht.com/oldradio>

-

Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: Re: Crystal Osc. Query
Message-Id: <19990123025755.LSQF7436@LOCALNAME>
Date: Sat, 23 Jan 1999 02:57:55 +0000

RE: Barry's comments and Steve's question..

I consider the "crystal killer" of all crystal killers, is the famous "Tri-Tet" oscillator circuit. One must be VERY careful with the Tri-Tet, especially the way the cathode circuit is tuned! They are famous for

fracturing crystals in a "New York second" if you don't know what you are doing!

73,

Sandy W5TVW

Message-ID: <36A46DDB.3F21@metronet.com>
Date: Tue, 19 Jan 1999 11:35:21 +0000
From: "Neal McEwen, K5RW" <nmcewen@metronet.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: boatanchors@theporch.com
Subject: Re: "Receiver Osc. Radiation": Factoid # 378-B
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

David Newkirk wrote:

> BTW, the term "backwave," which today means on-frequency leakage during
> key-up periods, came from arc-transmitter technology. The arcs used
> frequency-shift keying because the arc had to be kept burning. The
> frequency-shifted signal emitted during key-up periods was the backwave; the
> term "spacing wave" meant the same thing.

The key or a relay was shunted across a few turns of the output tuned circuit. Key down, you were on the transmit frequency. Key up, you emitted a backwave. This confused many an operator until he figured out what was going on.

This did not last long however as uniwave arc converters were made. Uniwave arc transmitters used a rather large SPDT relay to throw the output of the arc to either the antenna or a tuned dummy load. Now, no backwave into the antenna. The really big arc transmitter used banks of relays in parallel!

Why not key the arc? The arc was difficult to start and keep going so you had to let the arc run continuously.

By 1921, 80% of all commercial and military transmitters were of the arc type.

--

73 de K5RW, Neal McEwen, at "The Telegraph Office", nmcewen@metronet.com
A WWW Page for Telegraph Key Collectors and Historians
http://fohnix.metronet.com/~nmcewen/tel_off.html

Date: Fri, 22 Jan 1999 22:22:06 -0500 (EST)

From: "Roberta J. Barmore" <rbarmore@indy.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: looking for info
Message-ID: <Pine.SUN.3.96.990122220037.3096B-100000@indy2>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi!

Through a remarkably lucky chain of events, I seem to be on the verge of becoming some sort of 5th-meter columnist or some such thing....

A very clean HB 56-mc/s xcvr showed up on the front porch 'tother day. I'm told it was written up in QST, 1936ish, but have gone through my collection without any solid leads. (No indexes, it's a slow job).

Would someone with an easily searchable QST index please have a look? Title is probably along the lines of "A Lunchbox 56-mc Transceiver," and it can't have been any later than '38, as modulated oscillators were kicked off five meters in December of that year. Very few 5-m xcvs seem to have rated standalone articles, so it should pop right up on a computer search.

There are some Hints & Kinks rigs that come close enough for electrical restoration--thing is, this rig is uncased and I'm hoping the QST art. has some details on the cabinet to allow making a proper replacement.

...Just for the record, I have *no* intention of visiting TV channel 2 with my very own bootleg carrier. But, band plan etc. permitting, I might be tempted to build up another one (there's a Jones rig with a single 19 that'd be quick), chivvy 'em down to the high end of 6m and try 'em out over a short distance with dummy-load "antennas!" ...I want to be ready just in case the fmla tries their own Y2K solution. ;) (How do you log such emissions, with the osc amplitude and freq wobbling as one yacks--A3/F3?)

The boys at work were amused to see a "stone-age HT;" little 450-mc jobs are about as fundamental to TV as the tiny "green tweaker" screwdrivers we all carry.

73,
--Bobbi

KB9GKX "RJ" rbarmore@indy.net Roberta J. (Bobbi) Barmore
FISTS #3388 * G-QRP #10001 * ARRL * RSGB * WIA
Appreciator Of Vacuum-Tube Ham Gear and Vintage Keys

End of BOATANCHORS Digest 2393
